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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,857	11/04/2003	Young H. Kim	CL2207USNA	6319

43693 7590 06/16/2005

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WILMINGTON, DE 19808

EXAMINER

TRAN, THAO T

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/700,857

Applicant(s)

KIM ET AL.

Examiner

Thao T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/26/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8, 10-18, 20-26, 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soto et al. (US Pat. 5,008,325) or Taub (US Pat. 3,404,131).

Soto teaches a film prepared from an ionic polyurethane-urea polymer; wherein the polymer is prepared from reacting an aliphatic or cycloaliphatic diisocyanate, an organic polyol, a hydrophobic copolymer polyol, a difunctional isocyanate reactive component, and an amine chain extender (see abstract; col. 1, ln. 8-15). The organic polyol can be a polyether polyol of tetrahydrofuran and ethylene oxide and/or propylene oxide copolymer (see col. 6, ln. 22-43). The polyisocyanate can be toluene diisocyanate or methylene diphenyldiisocyanate (see col. 8, ln. 3-5). Compounds containing ionic groups and at least two isocyanate or isocyanate reactive groups are also used to prepare the ionic polyurethane-urea polymer (see col. 8, ln. 20-32).

Soto differs from the presently claimed invention in that the reference does not teach the amount of urea in the polyurethane-urea polymer product. However, Soto further teaches the ratio of isocyanate groups:isocyanate reactive groups determines the formation of the desired polymer product (see col. 7, ln. 24-38). Therefore, although Soto does not specify the amount of urea in the polymer product, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, that the amount of urea in the polymer product would have been

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determined by optimizing the amounts of functional and reactive groups in the reactants in order to achieve the desired results.

Soto further teaches the film can be used to coat leather (see col. 11, ln. 22), which is inclusive of gloves.

Taub teaches a film made of polyether-urethane-urea polymer; wherein the polymer is prepared by reacting a polyether polyol with an aromatic diisocyanate to form a hydroxyl-terminated polyether urethane; reacting the polyether urethane with an aliphatic diisocyanate to produce an isocyanate-terminated intermediate; reacting the intermediate with a diamine chain extender (see abstract). The polyether polyol is a copolymer of tetrahydrofuran and ethylene oxide or propylene oxide, having a molecular weight of 1000 to 2000; the aromatic diisocyanate is methylene bis(phenylisocyanate) or toluene diisocyanate (see col. 2, ln. 48-58).

Although Taub does not specify the amount of urea in the polymer product, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, that the amount of urea in the polymer product would have been determined by optimizing the amounts of functional and reactive groups in the reactants in order to achieve the desired results.

3. Claims 9, 19, 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soto or Taub as applied to claims 1, 10, and 20 above, and further in view of Bialke et al. (US Pat. 6,794,475).

Soto and Taub are as set forth in claims 1, 10, and 20 above and incorporated herein.

Soto further teaches the film can be used to coat leather (see col. 11, ln. 22) and the dispersion comprising additives (see col. 11, ln. 15-17). Taub teaches the film can be used to coat

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elastic fibers (see abstract). However, neither Soto nor Taub teach the film used to make gloves, or the dispersion including a surfactant.

Bialke teaches a poly(urethane-urea) polymer dispersion used in the production of gloves; wherein the dispersion comprises a surfactant (see abstract; col. 10, ln. 25; col. 11, ln. 54). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have employed the surfactant as taught by Bialke, in the dispersion of Soto or Taub although Soto does not specify the amount of urea in the polymer product, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, that the amount of urea in the polymer product would have been determined by optimizing the amounts of functional and reactive groups in the reactants, for the purpose of improving the dispersion of the polyurethane-urea polymer product.

Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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June 13, 2005

THAO T. TRAN
PATENT EXAMINER